IN THE SPECIFICATION

Please replace the paragraph at page 3, lines 21-30, with the following rewritten paragraph:

iii. In this connection, in the case of configuring a haptic function-provided input device by combining a plurality of vibrators and input means so that a haptic sense may be obtained through an operation to straightly touch its input ~~operation surface~~ detection plane, it is predicted that mere combination of the mechanism of separately arranging a display portion and input means as disclosed in Patent Literature 1 and an input function that combines various types of touch panels and display portion will not give a sufficient haptic sense if the operator touches the input ~~operation surface~~ detection plane at different speeds.

Please replace the paragraph beginning at page 14, line 24, to page 15, line 3, with the following rewritten paragraph:

For example, the input detection section 24 may be an input device such as a resistance film typed one, a surface acoustic wave ~~(AW)~~ (SAW) typed one, an optical typed one, or a multiple-stage typed tact switch. Preferably, any input device may be used as far as it is configured to be able to give position information and force information to the CPU 32. The above-described input detection section 24 is supplied with at least position information S1 and force information S2 (pressing force), which provides an input quantity, via the operator's finger 30a.

Please replace the paragraph at page 15, lines 25-30, with the following rewritten paragraph:

The A/D driver 31 is connected with the CPU 32 which is one example of computation means, and receives an input signal from the A/D driver 31 and supplies a

command D to devices of the power source unit33, the camera section 34, the other devices 35, the display portion 29, the speaker 36, and an actuator drive ~~section~~ circuit 37.

Please replace the paragraph at page 18, lines 5-11, with the following rewritten paragraph:

Next, an operation example will be described in which the operator gets a haptic sense from the camera body 20 with him or her sliding his or her finger 30a on the input ~~operation face~~ detection plane. FIG. 5 is a perspective view of the input detection section 24 for showing an example of operation on the input detection section 24, in which a portion of the operator's finger 30a is expanded.

Please replace the paragraph at page 18, lines 12-21, with the following rewritten paragraph:

In the present embodiment, the input detection section 24 shown in FIG. 5 has an input ~~operation face~~ detection plane PR and is operated in such a manner that the operator's finger 30a may be slid (go over) on this input ~~operation face~~ detection plane PR at a predetermined speed from, for example, a left bottom portion to a right top portion in the figure in a condition where that the finger 30a is in contact with that face PR through constant force. The input ~~operation face~~ detection plane PR is defined to be a region enclosed by a broken line including an upper of the chassis to which the input detection section 24 is projected.

Please replace the paragraph at page 19, lines 1-12, with the following rewritten paragraph:

In FIG. 6B, five points of positions P1-P5 are set on the input ~~operation face~~ detection plane PR. In the present embodiment, an example is employed in which one end of the input detection section 24 is arranged between positions P1 and P2 and the other end of the input detection section 24 is arranged between positions P4 and P5. The operator goes over the input ~~operation face~~ detection plane PR at a sliding speed Vo in a direction from position P1 to position P5. In this case, the CPU 32 calculates a rate of change Vx, which is detected by the input detection section 24, in input positions P1 through P5 on a time axis thereof, that is, a sliding speed Vx of the operator's finger 30a.

Please replace the paragraph at page 19, lines 13-19, with the following rewritten paragraph:

In the present embodiment, the input detection section 24 prepares beforehand a haptic waveform Wo when a standard rate of change in input positions P1 through P5 along the time axis (basic time axis) thereof, that is, a standard sliding speed of the operator's finger 30a is set to Vo. Table 1 shows contents of the haptic waveform Wo with respect to the standard sliding speed Vo (rate of change Vo in position).

Please replace the paragraph at page 20, lines 8-13, with the following rewritten paragraph:

Further, in the present embodiment, a sliding speed Vx in a case where the finger goes over on the input ~~operation face~~ detection plane PR at the standard sliding speed Vo or slower ($V1 \leq Vo$), namely, a detected time axis, is set equal to V1 ($Vx=V1$). This is defined to be

operation case I. Table 2 shows contents of a haptic waveform Wv with respect to sliding speed V1 (rate of change V1 in position).

Please replace the paragraph at page 22, lines 19-26, with the following rewritten paragraph:

FIG. 7A shows the operation case I, that is, a case where the operator's finger 30a has gone over the input ~~operation face~~ detection plane PR at a sliding speed of V1 of the operator's finger 30a that is the standard sliding speed Vo or slower ($V1 \leq Vo$). In this case, during a lapse of time when the operator's finger 30a moves from input positions P1 to P3, the input detection section 24 detects the sliding speed V1 of the operator's finger 30a.

Please replace the paragraph beginning at page 22, line 27, to page 23, line 5, with the following rewritten paragraph:

Based on a rate of change Vx with respect to the time axis in the input positions P1-P5, which is detected by the input detection section 24, the CPU 32 detects and recognizes that a sliding speed of V1=2cm/s at which the operator's finger 30 has gone over the input ~~operation face~~ detection plane PR is the same as the standard speed Vo or slower than that ($V1 \leq Vo$). If having detected operation case I, the CPU 32 supplies the actuator drive circuit 37 with such a command D (control information) as to generate the vibration pattern shown in Table 2.

Please replace the paragraph at page 26, lines 9-16, with the following rewritten paragraph:

FIG. 8A shows the operation case II, that is, a case where a sliding speed V2 of the operator's finger 30a at which the operator's finger 30a has gone on the input ~~operation face~~

detection plane PR is faster than the standard sliding speed Vo (V2>Vo). In this case too, during a lapse of time when the operator's finger 30a moves from input positions P1 to P3, the input detection section 24 detects a sliding speed V2 of the operator's finger 30a.

Please replace the paragraph at page 26, lines 17-25, with the following rewritten paragraph:

Based on a rate of change Vx in input positions P1-P5 with respect to the time axis detected by the input detection section 24, the CPU 32 detects and recognizes that a sliding speed of V2=4cm/s of the operator's finger 30a at which the operator's finger 30a has gone on the input ~~operation face~~ detection plane PR is faster than the standard speed Vo (V2≤Vo). If having detected operation case II, the CPU 32 supplies the actuator drive circuit 37 with the command D (control information) to generate the vibration pattern shown in Table 3.

Please replace the paragraph at page 29, lines 3-8, with the following rewritten paragraph:

Accordingly, in a case where the finger 30a moves on the input ~~operation face~~ detection plane PR faster than the standard sliding speed Vo, in the conventional method, the third and fourth stages iii and iv go dead, however, in the embodiment of the present invention, no stage goes dead, so that such a haptic image as shown in FIG. 8G can be obtained.

Please replace the paragraph at page 38, lines 16-24, with the following rewritten paragraph:

Then, the process goes to step R6 where the CPU 32 detects operation case I or operation case II based on a discriminant of T'=Vo · t'Vx, to provide a control branch. In

this embodiment, the sliding speed Vx in the case of going over the input ~~operation face~~ detection plane PR at the standard sliding speed Vo or lower ($V1 \leq Vo$) is set to be equal to V1 ($Vx=V1$). This case is defined to be operation case I. Table 2 shown earlier shows contents of a haptic waveform Wv with respect to the sliding speed V1.

Please replace the paragraph at page 40, lines 10-19, with the following rewritten paragraph:

In this embodiment, the sliding speed Vx at which the input ~~operation face~~ detection plane PR is gone over faster than the standard sliding speed Vo ($V2>Vo$) is set equal to V2 ($Vx=V2$). This is defined to be operation case II. Table 3 shown earlier shows contents of the haptic waveform Wv with respect to the sliding speed V2. Therefore, if a relationship of $Vo \cdot t'/Vx<1$ is decided at the above-described step R6, the process goes to step R8 where the actuator drive circuit 37 is supplied with such control information as to generate a vibration pattern corresponding to the operation case II.

Please replace the paragraph at page 42, lines 1-9, with the following rewritten paragraph:

Accordingly, if the finger 30a moves on the input ~~operation face~~ detection plane PR faster than the standard sliding speed Vo, i, the third and fourth stages iii and iv provide the dead portion 80n the conventional method, but in the embodiment of the present invention, such a dead portion 80 disappears, so that such a haptic image as shown in FIG. 8G can be obtained. Subsequently, the process goes to step R9 where the fast-forward mode is performed based on the sliding speed Vx. Then, the process returns to the step R3.

Please replace the paragraph beginning at page 42, line 27, to page 43, line 46, with the following rewritten paragraph:

Then, the process goes to step R15 where the zoom-out mode is performed. On the other hand, if a relationship of Vo • t'/Vx<1 is decided at the above-described step R12, the process goes to step R14 where the actuator drive circuit 37 is supplied with such control information as to generate a vibration pattern corresponding to operation case II (see the step R8). Subsequently, the process goes to the step R15 where the zoom-out mode is performed based on the sliding speed Vx. Then, the process returns to the step R3 of the flowchart shown in ~~FIGS. 14A-14D~~ FIG. 14A.

Please replace the paragraph at page 48, lines 24-30, with the following rewritten paragraph:

The operator goes over the input ~~operation face~~ detection plane PR at an arbitrary sliding speed along the touch-and-moving direction indicated by the arrow in the figure. In this case, a CPU 32 described with the first embodiment detects which one of the input positions P2-P6 the operator's finger 30a has reached from the input position P1 detected by the input detection section 24.

Please replace the paragraph at page 49, lines 1-11, with the following rewritten paragraph:

Further, according to this haptic function-provided input mechanism, if the operator's finger 30a touches the input detection plane at the input position P1 thereof, the actuator A vibrates this input ~~operation face~~ detection plane PR based on a vibration pattern having frequency of fx=400Hz, amplitude of Ax=30μm, and the number of times of Nx=20. Further, if the operator's finger 30a is slid from its input position P1 toward the arrow

direction, the actuator A once stops vibrating thereof and, when the next input position P2 is reached, vibrates the input ~~operation face~~ detection plane PR based on a vibration pattern having fx=200Hz, Ax=10μm, and Nx=1.

Please replace the paragraph at page 49, lines 12-21, with the following rewritten paragraph:

Further, if the operator's finger 30a is slid from its input position P2 toward the arrow direction, the actuator A once stops vibrating thereof and, when the next input position P3 is reached, vibrates the input ~~operation face~~ detection plane PR based on a vibration pattern having fx=200Hz, Ax=15μm, and Nx=1. Further, if the operator's finger 30a is slid from its input position P3 toward the arrow direction, the actuator A once stops vibrating thereof and, when the next input position P4 is reached, vibrates the input ~~operation face~~ detection plane PR based on a vibration pattern having fx=200Hz, Ax=20μm, and Nx=1.

Please replace the paragraph beginning at page 49, line 22, to page 50, line 2, with the following rewritten paragraph:

Further, if the operator's finger 30a is slid from its input position P4 toward the arrow direction, the actuator A once stops vibrating thereof and, when the next input position P5 is reached, vibrates the input ~~operation face~~ detection plane PR based on a vibration pattern having fx=200Hz, Ax=25μm, and Nx=1. Further, if the operator's finger 30a is slid from its input position P5 toward the arrow direction, the actuator A once stops vibrating thereof and, when the next input position P6 is reached, vibrates the input ~~operation face~~ detection plane PR based on a vibration pattern having fx=400Hz, Ax=30μm, and Nx=20.

Please replace the paragraph at page 50, lines 3-9, with the following rewritten paragraph:

It is to be noted that while the operator's finger 30a is in contact with the input ~~operation face~~ detection plane PR, the actuator B is set to continue to vibrate the input ~~operation face~~ detection plane PR based on a vibration pattern having fx=200Hz and Ax=30μm. Table 4 shows relationships between input positions P1-P6 and any one of the vibration patterns of the actuators A and B, their vibration sounds, and the operation contents thereof.

Please replace the paragraph beginning at page 50, line 15, to page 51, line 4, with the following rewritten paragraph:

For example, if the operator's finger 30a shown in FIG. 16 has touched the input position P1, the input detection section 24 detects that the operator's finger 30a has touched the input position P1 and notifies the CPU 32 of it. When having received this notification, the CPU 32 controls outputs of the actuators A and B. The actuator A vibrates the input ~~operation face~~ detection plane PR based on a vibration pattern having fx=400Hz, Ax=30μm, and Nx=20. As a result of this vibration, a "peep" vibration sound occurs. The actuator B continuously vibrates the input ~~operation face~~ detection plane PR based on a vibration pattern having fx=200Hz and Ax=30μm. The CPU 32 identifies a "start position" of the input operation.

Please replace the paragraph at page 51, lines 5-19, with the following rewritten paragraph:

Further, if the operator's finger 30a moves from, for example, the input position P1 by the separation distance L1 as the distance information Lx, it reaches the input position P2. In

this case, the input detection section 24 detects that the operator's finger 30a has arrived at the input position P2 and notifies the CPU 32 of it. When having received this notification, the CPU 32 controls an output of the actuator A. According to this control, the actuator A, which has once stopped vibrating thereof, vibrates the input ~~operation face~~ detection plane PR based on the vibration pattern having fx=200Hz, Ax=10μm, and Nx=1 when the operator's finger 30a has arrived at the input position P2. As a result of this vibration, a "peep" vibration sound occurs. The CPU 32 sets a zoom quantity "X0.5" to a zoom drive system etc. as an input operation quantity.

Please replace the paragraph beginning at page 51, line 20, to page 52, line 3, with the following rewritten paragraph:

Further, if the operator's finger 30a moves from the input position P1 by the separation distance L2, it reaches the input position P3. In this case, the input detection section 24 detects that the operator's finger 30a has arrived at the input position P3 and notifies the CPU 32 of it. When having received this notification, the CPU 32 controls an output of the actuator A. According to this control, the actuator A, which has once stopped vibrating thereof, vibrates the input ~~operation face~~ detection plane PR based on a vibration pattern having fx=200Hz, Ax=15μm, and Nx=1 when the operator's finger 30a has arrived at the input position P3. As a result of this vibration, a "peep" vibration sound occurs. The CPU 32 sets a zoom quantity "X1" to the zoom drive system etc. as an input operation quantity.

Please replace the paragraph at page 52, lines 4-16, with the following rewritten paragraph:

Further, if the operator's finger 30a moves from the input position P1 by the separation distance L3, it reaches the input position P4. In this case, the input detection section 24 detects that the operator's finger 30a has arrived at the input position P4 and notifies the CPU 32 of it. When having received this notification, the CPU 32 controls an output of the actuator A. According to this control, the actuator A, which has once stopped vibrating, vibrates the input ~~operation face~~ detection plane PR based on a vibration pattern having fx=200Hz, Ax=20μm, and Nx=1 when the operator's finger 30a has arrived at the input position P4. As a result of this vibration, a "peep" vibration sound occurs. The CPU 32 sets a zoom quantity "X2" to the zoom drive system etc. as an input operation quantity.

Please replace the paragraph at page 52, lines 17-30, with the following rewritten paragraph:

Further, if the operator's finger 30a moves from the input position P1 by the separation distance L4, it reaches the input position P5. In this case, the input detection section 24 detects that the operator's finger 30a has arrived at the input position P5 and notifies the CPU 32 of it. When having received this notification, the CPU 32 controls an output of the actuator A. According to this control, the actuator A, which has once stopped vibrating thereof, vibrates the input ~~operation face~~ detection plane PR based on the vibration pattern having fx=200Hz, Ax=25μm, and Nx=1 when the operator's finger 30a has arrived at the input position P5. As a result of this vibration, a "peep" vibration sound occurs. The CPU 32 sets a zoom quantity "X4" to the zoom drive system etc. as an input operation quantity.

Please replace the paragraph at page 53, lines 1-13, with the following rewritten paragraph:

It is to be noted that if the operator's finger 30a moves from the input position P1 by the separation distance L5, it reaches the input position P6. In this case, the input detection section 24 detects that the operator's finger 30a has arrived at the input position P6 and notifies the CPU 32 of it. When having received this notification, the CPU 32 controls an output of the actuator A. According to this control, the actuator A, which has once stopped vibrating thereof, vibrates the input ~~operation face~~ detection plane PR based on the vibration pattern having fx=400Hz, Ax=30μm, and Nx=20 when the operator's finger 30a has arrived at input position P6. As a result of this vibration, a "peep" vibration sound occurs. The CPU 32 identifies an "end position" of the input operation.

Please cancel the original Abstract at page 59, lines 1-15 in its entirety and insert therefor the following replacement Abstract on a separate sheet as follows: